PATENT USSN: 09/963,790 Atty Dkt: 032301WD230

REMARKS

The Office action mailed 12 September 2005, has been received and its contents carefully noted. The pending claims are claims 5, 9, 12, 34, 37, 38, 40, 42-48, and 51-54. Claims 5, 9, 12, 34, 35, 37, 40, 42, 53 and 54 were allowed. Claims 44, 46 and 48 were objected to and claims 43, 51 and 52 were rejected. By this amendment, claims 38, 43, 46, and 48 have been amended. Claims 45 and 47 have been canceled. New claims 55 and 56 have been added. Support may be found in the specification and the claims as originally filed. No statutory new matter has been added. Therefore, reconsideration and entry of the claims as amended are respectfully requested.

Claim Objections

The Examiner objected to claims 38 and 45-47.

As suggested by the Examiner, claims 45 and 47 are canceled and claims 46 and 47 have been amended to be independent claims directed to nucleic acid primers and probes. Therefore, Applicants respectfully submit that the claims, as amended, obviate the claim objections. Therefore, the objection to the claims should properly be withdrawn.

Rejection under 35 U.S.C. 112, first and second paragraphs

The Examiner rejected claims 43 and 51-52 under 35 U.S.C. 112, first and second paragraphs. Specifically, the Examiner deemed that the vector of claim 43 may include other unknown nucleotide sequences at the 5' and 3' ends of the polynucleotide of interest.

Applicants greatly appreciate the Examiner's cooperation and help during the telephonic interview on 2 December 2005. Applicants understand the Examiner's interpretation that claim 43 may include other unknown nucleotide sequences in addition to the vector nucleic acid sequences and the polynucleotide encompassed in allowed claims 40 cr 42. After discussing possible claim language that would clarify the scope and meaning of claim 43 as encompassing only vector nucleic acid sequences and the polynucleotide encompassed in allowed claims 40 or 42, it is believed that this is a situation where such clarity is difficult in view of the tenets of claim drafting and interpretation and the English language.

Therefore, as discussed with the Examiner: (1) Claim 43 is amended, as best as possible in view of the tenets of claim drafting and the English language, to claimfy the scope and meaning

PATENT USSN: 09/963,790 Atty Dkt: 032301WD230

of Applicants' invention, and (2) Applicants submit that claim 43 is to be interpreted as encompassing only vector nucleic acid sequences and the polynucleotide encompassed in allowed claims 40 or 42. The vector nucleic acid sequence is limited to only vector nucleic acid sequences of vectors known in the art, commercially available in the art, or both.

Claim 43 does not include other nucleotide sequences that are not vector nucleic acid sequences or the polynucleotide encompassed in claims 40 or 42. Such "other" nucleotide sequences not encompassed in claim 43 are (1) nucleotide sequences that do <u>not</u> encode the amino acid set forth in SEQ ID NO:2 and fragments thereof, and (2) nucleotide sequences that are <u>not</u> the vector nucleic acid sequences. It is noted that vector nucleic acid sequences are well known in the art and include, but are not limited to, restriction enzyme sites, origin of replication sequences, promoters, polylinkers, sequences for selective detection, e.g. bacterial resistance genes, cloning sites, and other vector components known in the art.

In summary, the vector of claim 43 is limited to vector nucleic acid molecules and the polynucleotide as encompassed in allowed claims 40 and 42. Applicants respectfully submit that claim 43 as amended and interpreted in view of its scope and meaning set forth herein is enabled and complies with the written description requirement.

Therefore, the rejection of claims 43, 51 and 52 under 35 U.S.C. 112, first and second paragraphs, should properly be withdrawn.

Rejoinder of Method Claims

Applicants respectfully submit that new claims 55 and 56 correspond to the original method claims and are similar in scope to the allowed product claims. Specifically, the new claims are directed to and limited to methods for making a protein encoded by the polynucleotides of the allowed claims. Applicants note that the language of new claims 55 and 56 is patterned after that of the allowed product claims. Therefore, rejainder is requested.

Request for Interview

Applicants greatly appreciate the Examiner's help and consideration. Applicants respectfully request either a telephonic or an in-person interview should there be any remaining issues.

PATENT USSN: 09/963,790 Atty Dkt: 032301WD230

CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefor are hereby authorized to be charged to Deposit Account No. 02-4300, Attorney Docket No. 032301WD230.

Respectfully submitted_

Suzannah K. Sundby Registration No. 43,172

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SMITH, GAMBRELL & RUSSELL, LLP 1850 M Street, N.W., Suite 800

Washington, D.C. 20036 Telephone: (202) 263-4332

Fax: (202) 263-4352 ssundby@sgrlaw.com